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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _06 May 2004_ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1,4-9,11-15, 18-20 and 23-51_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,4-9,11-15,18-20 and 23-51_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)		4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .	
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		5) ☐ Notice of Informal Patent Application (PTO-152)	
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .		6) ☐ Other: .	

DETAILED ACTION

Information Disclosure Statement

In response to applicant's request for comformation of consideration of the previously

filed Informaiton Disclosure Statement, the Informaiton Disclosure Statement along with the

attached PTO-1449 form initialled and signed 1/16/2004 was faxed to attorney of record.

Conformaiton of receipt of fax was received 05/13/2004.

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 5-6, 8-9, 13-15, 20, are 24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kraft in view of Chen.

Regarding claim 1 Kraft teaches providing selectable characters within a user interface

comprising determining an operating mode of a communication device (see abstract and col. 6,

lines 30-36). Kraft teaches receiving an input associated with a selected input key and

determining a group of characters associated with the selected key based on an operating mode

(see col. 14, lines 65-67 and col. 15, lines 1-4 & 7-12). Kraft teaches displaying a first character

of a group of characters associated with the selected key within a first portion of the user

interface; displaying the group of characters associated with the selected key proximal to the first

character within a second portion of the user interface; and highlighting a first character

displayed within the second portion of the user interface (see col. 14, lines 65-67, col. 15, lines 1-4 & 7-12, and FIG. 7). Kraft teaches highlighting a second character within a group of characters associated with a selected key in response to a record input; and displaying characters within the first portion of the user interface (see col. 14, lines 60-62 & 66-67 and col. 15, lines 1-2 and FIG. 7). Kraft does not specifically teach receiving a second input associated with the selected key, or highlighting a second character within a group of characters associated with the selected key in response to the second input. Chen teaches receiving a second input associated with the selected key and displaying the second character within the first portion of a user interface associated with the selected key in response to the second input (see col. 3, lines 15-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to specifically include receiving a second input associated with the selected key, or highlighting a second character within a group of characters associated with the selected key in response to the second input because this would allow for an improved method of inputting text through a keypad having fewer keystrokes.

Regarding claim 5 Kraft teaches segmenting a group of characters associated with a selected key displayed within the user interface (col. 5, lines 66-67, col. 6, lines 1-6 & 18-29 and FIG. 3).

Regarding claim 6 Kraft teaches determining a display mode associated with displaying the group of characters associated with the selected key within the user interface; and displaying the group of characters associated with the selected key based on the determined display mode (see abstract and col. 7, lines 15-50).

Regarding claim 8 Kraft teaches providing selectable characters within a user interface comprising a first display portion operable to display a group of characters associated with a selected key in response to the selected key being selected; a second display portion operable to display a first character from the group of characters associated with the selected key proximal to the first display portion in response to the selected key being selected a first time; and an input device operably coupled to the first display portion and the second display portion the input device comprising a plurality of keys (see col. 14, lines 65-67 and col. 15, lines 1-4 & 7-11). Kraft does not specifically teach displaying a second character from the characters associated with the selected key, in response to the selected key being selected a second time. Chen teaches displaying a second character from the characters associated with the selected key, in response to the selected key being selected a second time (see col. 3, lines 15-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include displaying a second character from the characters associated with the selected key, in response to the selected key being selected a second time because this would allow for an improved method of inputting text through a keypad having fewer keystrokes.

Regarding claim 9 Kraft teaches at least one operating mode associated with providing the group of characters (see col. 6, lines 30-35 and col. 7, lines 15-21).

Regarding claim 13 Kraft teaches an input device that comprises a keyboard having at least one key operably coupled to the group of characters based on an operating mode (see col. 3, lines 62-67).

Regarding claim 14 Kraft teaches selectable soft keys displayed within a portion of the user interface (see col. 3, lines 62-67 and col. 4, lines 29-36).

Regarding claim 15 Kraft teaches providing a communication address comprising

determining an operating mode of a communication device (see abstract col. 5, lines 59-62 and

col. 6, lines 30-36). Kraft teaches receiving an input associated with a selected key and

determining a group of characters associated with the selected key based on an operating mode

(see col. 14, lines 65-67 and col. 15, lines 1-4 & 7-11). Kraft teaches displaying a first character

of a group of characters associated with the selected key within a first portion of the user

interface; displaying the group of characters associated with the selected key proximal to the first

character within a second portion of the user interface; and highlighting a first character

displayed within the second portion of the user interface (see col. 14, lines 65-67, col. 15, lines 1-

4 & 7-12, and FIG. 7). Kraft teaches highlighting a second character within a group of

characters associated with a selected key in response to a record input; and displaying characters

within the first portion of the user interface (see col. 14, lines 60-62 & 66-67 and col. 15, lines 1-

2 and FIG. 7). Kraft does not specifically teach receiving a second input to select a second

character within the group of characters associated with the selected key. Chen teaches receiving

a second input to select a second character within the group of characters associated with the

selected key and displaying the second character within the first portion of a user interface (see

col. 3, lines 15-19). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to make the device adapt to specifically include receiving a second input to

select a second character within the group of characters associated with the selected key because

this would allow for an improved method of inputting text through a keypad having fewer

keystrokes.

Regarding claim 20 Kraft teaches a medium comprising encoded logic for displaying

selectable characters within a user interface operable to determine an operating mode of a

communication device (see abstract and col. 6, lines 5-10 & 30-36). Kraft teaches receiving an

input associated with a selected key and determining a group of characters associated with the

selected key based on an operating mode (see col. 14, lines 65-67 and col. 15, lines 1-4 & 7-11).

Kraft teaches displaying a first character of a group of characters associated with the selected key

within a first portion of the user interface; displaying the group of characters associated with the

selected key proximal to the first character within a second portion of the user interface; and

highlighting a first character displayed within the second portion of the user interface (see col.

14, lines 65-67, col. 15, lines 1-4 & 7-12, and FIG. 7). Kraft teaches highlighting a second

character within a group of characters associated with a selected key in response to a record

input; and displaying characters within the first portion of the user interface (see col. 14, lines

60-62 & 66-67 and col. 15, lines 1-2 and FIG. 7). Kraft does not specifically teach receiving a

second input to select a second character within the group of characters associated with the

selected key. Chen teaches receiving a second input to select a second character within the

group of characters associated with the selected key and displaying the second character within

the first portion of a user interface (see col. 3, lines 15-19). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to make the device adapt to

specifically include receiving a second input to select a second character within the group of

characters associated with the selected key because this would allow for an improved method of

inputting text through a keypad having fewer keystrokes.

Regarding claim 24 Kraft teaches determining a display mode associated with displaying

the group of characters associated with the selected key within the user interface; and displaying

the group of characters associated with the selected key based on the determined display mode

(see abstract and col. 7, lines 15-50).

Claims 4, 11, 18, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Kraft in view of Chen and Kushler.

Regarding claim 4 Kraft and Chen teach a device as recited in claim 1 except for

horizontally displaying the group of characters associated with the selected key within a second

portion of a user interface; and centrally displaying a cursor relative to the second portion of the

user interface within a first portion of the user interface, the cursor displaying a first highlighted

character displayed within the group of characters associated with the selected key. Kraft does

displaying the group of characters associated with the selected key within a second portion of a

user interface and a cursor relative to the second portion of the user interface within a first

portion of the user interface, the cursor displaying a first highlighted character displayed within

the group of characters associated with the selected key (col. 5, lines 66-67, col. 6, lines 1-6 &

18-29 and FIG. 3). Kushler teaches horizontally displaying the group of characters associated

with the selected key within a portion of a user interface; and centrally displaying a cursor within

a first portion of the user interface (see col. 14, lines 9-17 and FIG. 1b). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to make the device

adapt to include horizontally displaying the group of characters associated with the selected key

within a second portion of a user interface; and centrally displaying a cursor relative to the

second portion of the user interface within a first portion of the user interface, the cursor

displaying a first highlighted character displayed within the group of characters associated with

the selected key because this would allow for improved entry of character input with a reduced

keyboard.

Regarding claim 11 Kraft and Chen teach a device as recited in claim 4 and is rejected

given the same reasoning as above.

Regarding claim 18 Kraft and Chen teach a device as recited in claim 4 and is rejected

given the same reasoning as above.

Regarding claim 23 Kraft and Chen teach a device as recited in claim 4 and is rejected

given the same reasoning as above.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kraft in view of

Chen and Grover.

Regarding claim 12 Kraft teaches a device as recited in claim 8 except for an algorithm

operable to determine a time-out period based on user interaction with the user interface. Kraft

does teach determining a time-out period based on user interaction with a user interface (see col.

8, lines 15-42). Grover teaches an algorithm operable to set a variable (see col. 7, line 32). It

would have been obvious to one of ordinary skill in the art at the time the invention was made to

make the time-out period in Kraft adapt to be generated using an algorithm because this would

allow for a user to automatically enable or disable display of characters in a user interface.

Claims 7, 19, 25-26, 41-43, and 48-51 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kraft in view of Chen and Ouyang.

Regarding claim 7 Kraft and Chen teaches a device as recited in claim 1 except for

determining a time interval between receiving the first input and receiving the second input; and

calculating a time-out period using the time interval. Ouyang teaches determining a time interval

between receiving the first input and receiving the second input; and calculating a time-out

period using the time interval (see col. 6, lines 17-20 and col. 8, lines 5-9). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to make the device

adapt to include determining a time interval between receiving the first input and receiving the

second input; and calculating a time-out period using the time interval because this would allow

for improved determination of text entry using a keypad.

Regarding claim 19 Kraft, Chen, and Ouyang teach a device as recited in claim 7 and is

rejected given the same reasoning as above.

Regarding claim 25 Kraft, Chen, and Ouyang teach a device as recited in claim 7 and is

rejected given the same reasoning as above.

Regarding claim 26 Kraft teaches determining a time-out period associated with

displaying the group of characters associated with the selected key and highlight a first character

within a group of characters associated with the selected key (see col. 7, lines 35-45, col. 8, lines

15-35 and FIG. 5). Kraft teaches highlighting a second character within the group of characters

associated with the selected key (see col. 14, lines 60-62 & 66-67 and col. 15, lines 1-2 and FIG.

7). Ouyang teaches selecting a key based on a time-out period (see col. 6, lines 17-20).

Regarding claim 41 providing selectable characters within a user interface comprising

determining an operating mode of a communication device (see abstract and col. 6, lines 30-36).

Kraft teaches receiving a first input associated with a selected input key and determining a group

of characters associated with the selected key based on an operating mode (see col. 14, lines 65-

67 and col. 15, lines 1-4 & 7-12). Kraft teaches displaying a first character of a group of

characters associated with the selected key within a user interface (see col. 14, lines 65-67, col.

15, lines 1-4 & 7-12, and FIG. 7). Kraft does not specifically teach receiving a second input

associated with the selected key, or determining a time interval between receiving the first input

and receiving the second input; and calculating a time-out period based on the time interval.

Chen teaches receiving a second input associated with the selected key (see col. 3, lines 15-19).

Ouyang teaches determining a time interval between receiving the first input and receiving the

second input; and calculating a time-out period based on the time interval (see col. 6, lines 17-20

and col. 8, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time

the invention was made to make the device adapt to include receiving a second input associated

with the selected key, or determining a time interval between receiving the first input and

receiving the second input; and calculating a time-out period based on the time interval because

this would allow for improved determination of text entry using a keypad.

Regarding claim 42 Kraft teaches segmenting a group of characters associated with a

selected key displayed within the user interface (col. 5, lines 66-67, col. 6, lines 1-6 & 18-29 and

FIG. 3).

Regarding claim 43 Kraft teaches determining a display mode associated with displaying

the group of characters associated with the selected key within the user interface; and displaying

the group of characters associated with the selected key based on the determined display mode

(see abstract and col. 7, lines 15-50).

Regarding claim 48 Kraft teaches providing a communication address comprising

determining an operating mode of a communication device (see abstract col. 5, lines 59-62 and

col. 6, lines 30-36). Kraft teaches receiving an input associated with a selected key and

determining a group of characters associated with the selected key based on an operating mode

(see col. 14, lines 65-67 and col. 15, lines 1-4 & 7-11). Kraft teaches displaying a group of

characters associated with the selected key within a first portion of the user interface. Kraft does

not specifically teach receiving a second input associated with selecting the select key or

determining a time interval between receiving the first input and receiving the second input; and

calculating a time-out period using the time interval. Chen teaches receiving a second input

associated with the selected key (see col. 3, lines 15-19). Ouyang teaches determining a time

interval between receiving the first input and receiving the second input; and calculating a time-

out period using the time interval (see col. 6, lines 17-20 and col. 8, lines 5-9). It would have

been obvious to one of ordinary skill in the art at the time the invention was made to make the

device adapt to include determining a time interval between receiving the first input and

receiving the second input; and calculating a time-out period using the time interval because this

would allow for improved determination of text entry using a keypad.

Regarding claim 49 Kraft teaches providing a communication address comprising

determining an operating mode of a communication device (see abstract col. 5, lines 59-62 and

col. 6, lines 30-36). Kraft teaches receiving an input associated with a selected key and

determining a group of characters associated with the selected key based on an operating mode

(see col. 14, lines 65-67 and col. 15, lines 1-4 & 7-11). Kraft teaches displaying a group of

characters associated with the selected key within a first portion of the user interface. Kraft does

not specifically teach receiving a second input associated with selecting the select key or

determining a time interval between receiving the first input and receiving the second input; and

calculating a time-out period using the time interval. Chen teaches receiving a second input

associated with the selected key (see col. 3, lines 15-19). Ouyang teaches determining a time

interval between receiving the first input and receiving the second input; and calculating a time-

out period using the time interval (see col. 6, lines 17-20 and col. 8, lines 5-9). It would have

been obvious to one of ordinary skill in the art at the time the invention was made to make the

device adapt to include determining a time interval between receiving the first input and

receiving the second input; and calculating a time-out period using the time interval because this

would allow for improved determination of text entry using a keypad.

Regarding claim 50 Kraft teaches determining a display mode associated with displaying

the group of characters associated with the selected key within the user interface; and displaying

the group of characters associated with the selected key based on the determined display mode

(see abstract and col. 7, lines 15-50).

Regarding claim 51 Kraft teaches determining a time-out period associated with

displaying the group of characters associated with the selected key and highlight a first character

within a group of characters associated with the selected key (see col. 7, lines 35-45, col. 8, lines

15-35 and FIG. 5). Kraft teaches highlighting a second character within the group of characters

associated with the selected key (see col. 14, lines 60-62 & 66-67 and col. 15, lines 1-2 and FIG.

7). Ouyang teaches selecting a key based on a time-out period (see col. 6, lines 17-20).

Claims 27-29, 31-32, 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kraft in view of Kushler.

Regarding claim 27 providing selectable characters within a user interface comprising

determining an operating mode of a communication device (see abstract and col. 6, lines 30-36).

Kraft teaches receiving first input associated with a selected input key and determining a group

of characters associated with the selected key based on an operating mode (see col. 14, lines 65-67 and col. 15, lines 1-4 & 7-12). Kraft teaches displaying a first character of a group of characters associated with the selected key within a first portion of the user interface (see col. 14, lines 65-67, col. 15, lines 1-4 & 7-12, and FIG. 7). Kraft teaches displaying a cursor within the first portion of the user interface, highlighting the first character; or displaying the group of characters associated with the selected key within a second portion of a user interface (col. 5, lines 66-67, col. 6, lines 1-6 & 18-29 and FIG. 3). Kraft does not specifically teach a cursor positioned centrally relative to a second portion of the user interface, and horizontally displaying the group of characters associated with the selected key within a second portion of a user interface. Kushler teaches horizontally displaying the group of characters associated with the selected key within a portion of a user interface; and centrally displaying a cursor within a first portion of the user interface (see col. 14, lines 9-17 and FIG. 1b). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a cursor positioned centrally relative to a second portion of the user interface, and horizontally displaying the group of characters associated with the selected key within a second portion of a user interface because this would allow for improved entry of character input with a reduced keyboard.

Regarding claim 28 Kraft teaches segmenting a group of characters associated with a selected key displayed within the user interface (col. 5, lines 66-67, col. 6, lines 1-6 & 18-29 and FIG. 3).

Regarding claim 29 Kraft teaches determining a display mode associated with displaying the group of characters associated with the selected key within the user interface; and displaying

the group of characters associated with the selected key based on the determined display mode

(see abstract and col. 7, lines 15-50).

Regarding claim 31 Kraft teaches a first display portion operable to display a group of

characters associated with the selected key in response to a selected key being selected a first

time (see col. 5, lines 66-67, col. 6, lines 1-6 & 18-29 and FIG. 3). Kraft a cursor displayed

relative to the first display portion within the second display (col. 5, lines 66-67, col. 6, lines 1-6

& 18-29 and FIG. 3). Kraft teaches displaying a first character of the group of characters

associated with the selected key proximal to the first display portion in response to the selected

key being selected a first time (see col. 14, lines 65-67, col. 15, lines 1-4 & 7-12, and FIG. 7).

Kraft teaches an input device operably coupled to the first display portion and the second display

portion the input device comprising a plurality of keys (see col. 14, lines 65-67 and col. 15, lines

1-4 & 7-11). Kraft does not specifically teach a first display portion operable to horizontally

displaying a group of characters associated with the selected key, a cursor centrally displayed, or

displaying a second character of the characters associated with the selected key, in response to

the selected key being selected a second time. Chen teaches displaying a second character of the

characters associated with the selected key, in response to the selected key being selected a

second time (see col. 3, lines 15-19). Kushler teaches a first display portion operable to

horizontally display a group of characters associated with the selected key and a cursor centrally

displayed (see col. 14, lines 9-17 and FIG. 1b). It would have been obvious to one of ordinary

skill in the art at the time the invention was made to make the device adapt to specifically include

a first display portion operable to horizontally displaying a group of characters associated with

the selected key, a cursor centrally displayed, and displaying a second character of the characters

associated with the selected key, in response to the selected key being selected a second time

because this would allow for an improved method of inputting text through a keypad having

fewer keystrokes.

Regarding claim 32 Kraft and Chen teach a device as recited in claim 9 and is rejected

given the same reasoning as above.

Regarding claim 34 Kraft and Chen teach a device as recited in claim 13 and is rejected

given the same reasoning as above.

Regarding claim 35 Kraft and Chen teach a device as recited in claim 14 and is rejected

given the same reasoning as above.

Regarding claim 36 providing selectable characters within a user interface comprising

determining an operating mode of a communication device (see abstract and col. 6, lines 30-36).

Kraft teaches receiving an input associated with a selected input key and determining a group of

characters associated with the selected key based on an operating mode (see col. 14, lines 65-67

and col. 15, lines 1-4 & 7-12). Kraft teaches displaying a first character of a group of characters

associated with the selected key within a first portion of the user interface (see col. 14, lines 65-

67, col. 15, lines 1-4 & 7-12, and FIG. 7). Kraft teaches displaying a cursor within the first

portion of the user interface, highlighting the first character; and displaying the group of

characters associated with the selected key proximal to the first character within the second

portion of the user interface (col. 5, lines 66-67, col. 6, lines 1-6 & 18-29 and FIG. 3). Kraft

does not specifically teach a cursor positioned centrally relative to a second portion of the user

interface, or horizontally displaying the group of characters associated with the selected key

proximal to the first character within the second portion of the user interface. Kushler teaches a

cursor positioned centrally relative to a portion of the user interface and horizontally displaying

the group of characters associated with the selected key proximal to the first character within the

second portion of the user interface (see col. 14, lines 9-17 and FIG. 1b). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to make the device

adapt to include a cursor positioned centrally relative to a second portion of the user interface,

and horizontally displaying the group of characters associated with the selected key proximal to

the first character within the second portion of the user interface because this would allow for

improved entry of character input with a reduced keyboard.

Regarding claim 37 providing selectable characters within a user interface comprising

determining an operating mode of a communication device (see abstract and col. 6, lines 30-36).

Kraft teaches receiving an input associated with a selected input key and determining a group of

characters associated with the selected key based on an operating mode (see col. 14, lines 65-67

and col. 15, lines 1-4 & 7-12). Kraft teaches displaying a first character of a group of characters

associated with the selected key within a first portion of the user interface (see col. 14, lines 65-

67, col. 15, lines 1-4 & 7-12, and FIG. 7). Kraft teaches displaying a cursor within the first

portion of the user interface, highlighting the first character; and displaying the group of

characters associated with the selected key proximal to the first character within the second

portion of the user interface (col. 5, lines 66-67, col. 6, lines 1-6 & 18-29 and FIG. 3). Kraft

does not specifically teach a cursor positioned centrally relative to a second portion of the user

interface, or horizontally displaying the group of characters associated with the selected key

proximal to the first character within the second portion of the user interface. Kushler teaches a

cursor positioned centrally relative to a second portion of the user interface and horizontally

displaying the group of characters associated with the selected key proximal to the first character within the a portion of the user interface (see col. 14, lines 9-17 and FIG. 1b). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a cursor positioned centrally relative to a second portion of the user interface, and horizontally displaying the group of characters associated with the selected key proximal to the first character within the second portion of the user interface because this would allow for improved entry of character input with a reduced keyboard.

Regarding claim 38 Kraft teaches a device as recited in claim 29 and is rejected given the same reasoning as above.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kraft in view of Kusler and Grover.

Regarding claim 33 Kraft and Kushler teach a device as recited in claim 31 except for an algorithm operable to determine a time-out period based on user interaction with the user interface. Kraft does teach determining a time-out period based on user interaction with a user interface (see col. 8, lines 15-42). Grover teaches an algorithm operable to set a variable (see col. 7, line 32). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the time-out period in Kraft adapt to be generated using an algorithm because this would allow for a user to automatically enable or disable display of characters in a user interface.

Claims 30 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraft in view of Chen, Kushler and Ouyang.

Regarding claim 30 Kraft and Kusler teach a device as recited in claim 30 except for receiving a second input associated with the selected key; determining a time interval between receiving the first input and receiving the second input; and calculating a time-out period using the time interval. Chen teaches receiving a second input associated with the selected key (see col. 3, lines 15-19). Ouyang teaches determining a time interval between receiving the first input and receiving the second input and calculating a time-out period using the time interval (see col. 6, lines 17-20 and col. 8, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include receiving a second input associated with the selected key; determining a time interval between receiving the first input and receiving the second input; and calculating a time-out period using the time interval because this would allow for improved determination of text entry using a keypad.

Regarding claim 39 Kraft and Kushler teach a device as recited in claim 37 except for receiving a second input associated with the selected key and determining a time interval between receiving the first input and receiving the second input and calculating a time-out period using the time interval. Chen teaches receiving a second input associated with the selected key (see col. 3, lines 15-19). Ouyang teaches determining a time interval between receiving the first input and receiving the second input and calculating a time-out period using the time interval (see col. 6, lines 17-20 and col. 8, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include receiving a second input associated with the selected key and determining a time interval between receiving the first input and receiving the second input and calculating a time-out period using the time interval because this would allow for improved determination of text entry using a keypad.

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kraft in view of

Kushler and Ouyang.

Regarding claim 40 Kraft and Kushler teach a device as recited in claim 37 except for

determining a time-out period associated with displaying the group of characters associated with

the selected key and highlight a first character within a group of characters associated with the

selected key, highlighting a second character within the group of characters associated with the

selected key. Kraft does teach determining a time-out period associated with displaying the

group of characters associated with the selected key and highlight a first character within a group

of characters associated with the selected key (see col. 7, lines 35-45, col. 8, lines 15-35 and FIG.

5). Kraft does teach highlighting a second character within the group of characters associated

with the selected key (see col. 14, lines 60-62 & 66-67 and col. 15, lines 1-2 and FIG. 7).

Ouyang teaches selecting a key based on a time-out period (see col. 6, lines 17-20). It would

have been obvious to one of ordinary skill in the art at the time the invention was made to make

the device adapt to include determining a time-out period associated with displaying the group of

characters associated with the selected key and highlight a first character within a group of

characters associated with the selected key, highlighting a second character within the group of

characters associated with the selected key because this would allow for improved entry of

character input with a reduced keyboard

Claims 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraft in

view of Ouyang.

Regarding claim 44 Kraft teaches providing selectable characters within a user interface

comprising a first display portion operable to display a group of characters associated with a

selected key in response to the selected key being selected; a second display portion operable to display a first character from the group of characters associated with the selected key proximal to the first display portion; and an input device operably coupled to the first display portion and the second display portion the input device comprising a plurality of keys (see col. 14, lines 65-67 and col. 15, lines 1-4 & 7-11). Kraft does not specifically teach a processor operable to determine a time-out period based on user interaction with the user interface. Ouyang teaches a process operable to determine a time-out period based on user interaction with the user interface (see col. 6, lines 17-20 and col. 8, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a processor operable to determine a time-out period based on user interaction with the user interface because this would allow for improved determination of text entry using a keypad.

Regarding claim 45 Kraft teaches at least one operating mode associated with providing the group of characters (see col. 6, lines 30-35 and col. 7, lines 15-21).

Regarding claim 46 Kraft teaches an input device that comprises a keyboard having at least one key operably coupled to the group of characters based on an operating mode (see col. 3, lines 62-67).

Regarding claim 47 Kraft teaches selectable soft keys displayed within a portion of the user interface (see col. 3, lines 62-67 and col. 4, lines 29-36).

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they

must be numbered consecutively beginning with the number next following the highest

numbered claims previously presented (whether entered or not).

Misnumbered claims 53 and 54 have been renumbered to 50 and 51 respectively.Claims

53 and 54 are objected to because of the following informalities: Claim 53 is improperly

dependent on claim 54 and claim 54 depends upon itself. Appropriate correction is required.

Response to Arguments

Applicant's arguments with respect to claims 1, 4-15, 18-20, and 23-51 have been

considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Schneider-Hufschmidt et al. U.S. Patent 6,130,628 discloses a device for inputting

alphanumeric and special symbols.

Grimmett U.S. Patent 5,977,887 discloses data storage apparatus.

Kim U.S. Patent 6,459,390 discloses a method of inputting characters in a wireless

portable terminal.

Nowlan U.S. Patent 6,169,538 discloses a method and apparatus for implementing a

graphical user interface keyboard and a text buffer of electronic devices.

Macor U.S. Patent 5, 841, 849 discloses a user interface for personal telecommunication

devices.

Macor U.S. Patent 5,677,949 discloses a telephone with minimal switches for dialing.

Balakrishnan et al. U.S. Patent 5,952,942 discloses a method and device for input of text

messages from a keypad.

Ho et al. U.S. Patent 6,307,541 discloses a method and system for inputting Chinese-

characters through virtual keyboards to data processor.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The

examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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July 19, 2004

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